

XXXII.—On some new Species of Mollusca from Japan.

By ARTHUR ADAMS, F.L.S. &c.

Genus KLEINELLA, A. Adams.

Kleinella sulcata, A. Adams.

K. testa oblonga, tenui, turbinata, profunde umbilicata; spira elata, conoidea, sordide alba, transversim sulcata, sulcis distantibus, interstitiis longitudinaliter concinne striatis; anfractibus $3\frac{1}{2}$, planis, superne angulatis; anfractu ultimo ventricosos; apertura oblonga, antice eversa et subeffusa; labro tenui, postice angulato.

Hab. Suwonado Sea; 7 fathoms.

Genus CYRILLA, A. Adams.

Cyrilla decussata, A. Adams.

C. testa oblonga, obliqua, vix inæquilaterali, alba, solida; costellis radiantibus et lirulis concentricis confertim decussata; cardinis dentibus posterioribus in laminas non desinentibus.

Hab. Gotto Islands; 48 fathoms.

Genus MUCRONALIA, A. Adams.

Mucronalia exilis, A. Adams.

M. testa parva, subulata, graciliore, apice subito mucronato, recta, tenui, alba, polita, semiopaca, linea spirali angusta rufo-fusca ornata; anfractu ultimo lineis duabus succincto; apertura elongato-ovata.

Hab. Simonoseki, Suwonado Sea; 7 fathoms.

Genus APICALIA, A. Adams.

Testa distorta, polita, imperforata, subulata; anfractibus irregularibus, supremis in mucronem dispositis. Apertura oblonga; labio simplici.

This form of *Eulimida* bears the same relation to *Eulima* that *Mucronalia* does to *Leiostraca*. It is milk-white, without any coloured markings, and the whorls are distorted; but it has the very peculiar mucro observed in *Stylifer* and *Mucronalia*.

Apicalia gibba, A. Adams.

A. testa obliqua, elevato-conoidea, alba, solida, vix opaca; anfractibus normalibus 4, convexis, subgibbosis, supremis angustatis in forma mucronis dispositis; apertura obliqua, ovata; labio subincrassato.

Hab. Gotto Islands; 71 fathoms.

Genus NISO, Risso.

Niso interrupta, Sow.

Animal milk-white. Tentacles flat, subulate, diverging, ob-

tuse at the tips, not folded or ear-like, margined with pale black. Eyes small, black, and sessile at the outer bases of the tentacles just within the margin of the head. Head bordered with pale black. An oblique pale-black line extends from the lower part of the neck down the side, ending at the operculigerous lobe, which is large, thick, and closely applied to the under surface of the last whorl.

Hab. Simonoseki; 7 fathoms.

Genus SCALA, Klein.

Scala soluta, A. Adams.

S. testa pyramidali, acuminata, alba, glabra, pellucida; anfractibus disjunctis, angustis varicibus 6 distantibus laminatis simplicibus prope suturas in angulum productis; apertura circulari.

Hab. Port Lindsay; 15 fathoms.

This pretty species has the loosely rolled whorls and form of *S. hyalina*, Hinds, and the simple varices of *S. laxata*, Sow.

Genus ISANDER, H. & A. Adams.

1. *Isander maculosus*, A. Adams.

I. testa globoso-conoidea, solida, anguste umbilicata, alba, polita, superne transversim sulcata maculis rufo-fuscis ornata; anfractu ultimo ultra peripheriam angulato; apertura subquadrata; labio rectiusculo, antice dilatato; umbilico angusto, margine crenulato-rugoso.

Hab. Gotto Islands; 71 fathoms.

2. *Isander crenelliferus*, A. Adams.

I. testa globoso-turbinata, late umbilicata, alba, solida, semiopaca, longitudinaliter plicato-rugosa, suturis canaliculatis; anfractibus ad suturas crenulatis; apertura subcirculari; labio incrassato, arcuato; umbilico margine crenato.

Hab. Gotto Islands; 71 fathoms.

Genus ETHALIA, H. & A. Adams.

1. *Ethalia candida*, A. Adams.

E. testa depresso-turbinata, alba, solida, opaca, transversim regulariter valde striata; anfractibus $2\frac{1}{2}$, planulatis; apertura circulari; labio callo expanso umbilicum vix tegente; umbilico margine crenato-rugoso.

Hab. Gotto Islands; 71 fathoms.

2. *Ethalia polita*, A. Adams.

E. testa orbiculato-conoidea, alba, lævi, polita, vix opaca, spira sub-

conica, basi convexa, callo crasso obtecta; anfractibus sub lente obsolete transversim striatis; apertura circulari, peritremate continuo; labio incrassato.

Hab. Gotto Islands; 71 fathoms.

Genus SEMICASSIS, Klein.

Semicassis japonica, Reeve.

Animal light pink. Head long, narrow, flattened. Tentacles subulate, flattened, broad at the base, pale yellow, with opaque-white tips and with a dark-brown tapering marginal stripe. Eyes very large and black, without pupils, on slight swellings at the outer bases of the tentacles. Edge of foot narrowly margined with greenish yellow.

Hab. Gotto Islands; 71 fathoms.

Genus CYLLENE, Gray.

Species incerta.

Animal semipellucid, white, with an opaque-white stripe along each side of the upper surface of the foot, and two short diverging stripes of the same colour on the upper part immediately behind the operculum. Head broad, triangular, and depressed; tentacles long, filiform, diverging. Eyes large and black, on swellings at the outer bases of the tentacles. Siphon recurved, moderate. Foot large, broad, with parallel sides, straight and auriculate on each side in front, and truncately rounded behind, bearing the operculum obliquely; the hind margin simple.

Hab. Satanosaki, south coast of Kiusu; 55 fathoms.

Genus CRYPTA, Humphrey.

Crypta lamellosa, A. Adams.

C. testa depressa, orbiculari, lamellosa; apice parvo, spirali, postico, submarginali; lamellis dorsalibus concentricis, rugosis, confertim imbricatis; septo interno postico, angustato, curvato; margine libero concavo.

Hab. Gotto Islands; 48 fathoms.

A small, flat, orbicular, lamellose species, with a narrow concave septum.

Genus TURRICULA, Klein.

Turricula (Costellaria) pyramidella, A. Adams.

T. testa pyramidaliturruta; spira producta, attenuata; anfractibus $6\frac{1}{2}$, planatis, supremis parvis angustatis, longitudinaliter costatis, costis rectis distantibus, interstitiis transversim liratis; apertura subtriangulari; labio recto, plicis tribus obliquis spiralibus in-

structo; labro margine in medio obtusim angulato; colore fulvicante.

Hab. Satanosaki, south coast of Kiusu; 55 fathoms.

Genus ZEIDORA, A. Adams.

On comparing my examples of this curious little genus, I observed that I had confounded two species under the name *calceolina*. The second of the two I beg leave now to describe under the name of

Zeidora reticulata, A. Adams.

Z. testa oblonga, dorso convexa, lineis elevatis longitudinalibus radiantibus et lirulis concentricis pulcherrime decussata; apertura margine crenulato, fissura profunda angusta.

Hab. Mino-Sima; 63 fathoms.

This species differs from *Z. calceolina* in being much more convex, less obtuse anteriorly, and in the fissure being narrow and deeply incised. The sculpture, moreover, is very different, the surface being finely reticulate instead of widely cancellate.

Yokubama, August 11, 1861.

XXXIII.—*Note on the Molluscan Fauna of Japan.*

By ARTHUR ADAMS, F.L.S. &c.

WITH regard at least to the Molluscan fauna, the Manchurian province, indicated with doubt by Professor Edward Forbes in his 'Map of the Distribution of Marine Life,' does not exist.

The Japonian province is bounded on the north by the Okhotsian and on the south by the Indo-Pacific province, and it receives contributions from both. *Littorina grandis* and *subtenebrosa*, *Cryptochiton Stelleri* and *Amicula amiculata*, for example, have travelled south from the Sea of Okhotsk; while *Littorina sinensis* and *Acanthochites scutiger* have come northward from the Yellow Sea. The great northern species of *Neptunea* and *Buccinum* and the *Velutina* family abound and flourish towards its northern boundary, while to the south linger vestiges of the great tropical families of Cowries, Olives, and Cones. The neutral ground, or place of meeting of north and south, seems to be near the Strait of Tsuka, or the south end of Yesso and the north of Nippon.

Some genera and species have only been met with hitherto in the Sea of Japan, and are possibly peculiar to the Japonian province; at least we must consider them indigenous to this sea until they shall have been detected elsewhere. Examples of this occur in the genera *Zeidora*, *Cranopsis*, *Morchia*, *Cyrella*, and